

Remarks

With respect to timing, Applicant notes that this response is being filed on June 6, 2005 which is a Monday and therefore has been filed within the expedited response time set forth in the Office Action referenced above.

As an initial matter, Applicant notes that the Office Action Summary page indicates that claims 7 and 23 are both rejected and objected to. However, upon reviewing the written portion of the Office Action, it is clear that no reason for rejecting either of claims 7 or 23 was provided in the Office Action. In addition, Applicant notes that while claims 11-14 are still pending in this application, no part of the most recent Office Action indicates the status (i.e., allowed, rejected, objected to, etc.) of claims 11-14. For these reasons Applicant cannot respond fully to the Office Action and requests that another complete Office Action be issued. Because no reasons for rejecting any of claims 7, 11-14 or 23 were provided in the Office Action, Applicant is assuming that the Examiner meant to object to those claims as opposed to rejecting those claims.

Applicant has amended claims 3 and 19 to include the limitations of original claims 1 and 17, respectively, and therefore claims 3 and 19 should be in condition for allowance. In addition, Applicant has amended claim 18 to depend from claim 19 and thus claim 18 should be patentably distinct over Lipo. Moreover, each of claims 7, 11, 13 and 23 have been amended to include the limitations of intervening claims and should be in condition for allowance.

The written portion of the Office Action rejected each of claims 1, 2, 4, 15, 16, 17, 18, 20 and 29 as obvious over Lipo (4,724,373). Claims 2, 4, 20-22 and 27-39 have been cancelled.

Applicant has amended claim 1 to include the limitations of original claims 1, 2 and 4. Applicant believes that original claim 4 was and now that amended claim 1 is patentably distinct over Lipo.

With respect to amended claim 1, amended claim 1 now requires that a single torque reference value is used in two separate mathematical operations. First, claim amended 1 requires the step of subtracting a torque estimate value from the torque reference value to provide an error value. Second, amended claim 1 requires mathematically combining the error value and the torque reference value to generate

a torque command value. Thus, claim 1 requires use of the torque reference value two separate times. To this end, see Fig. 2 of the present specification where the single torque reference value T_{ref} is used twice, once at summer 56 and a second time at summer 60.

Referring to Lipo's Fig. 9, as illustrated, Lipo's torque reference value T_e^* is only used once at summer 112 and therefore Lipo fails to teach or suggest the amended claim 1 invention that requires that a torque reference value be used twice. To the extent that the Examiner maintains the current rejection of claim 1, Applicant requests that the Examiner clearly point out where Lipo teaches that the torque reference value T_e^* in its pristine form is used two separate times as Applicant was unable to identify any such teaching or suggestion in Lipo.


With respect to claims 15 and 16, each of those claims depends from amended claim 1 that should be in condition for allowance for the reasons discussed above.

Applicant has introduced no new matter in making the above amendments and antecedent basis exists in the specification and claims as originally filed for each amendment. In view of the above amendments and remarks, Applicant believes claims 1, 3, 5-16, 18, 19 and 23-26 of the present application recite patentable subject matter and allowance of the same is requested. No fee in addition to the fees already authorized in this and accompanying documentation is believed to be required to enter this amendment, however, if an additional fee is required, please charge Deposit Account No. 17-0055 in the amount of the fee.

Respectfully submitted,

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